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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/538,234

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Metin Tuglar

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EXAMINER

KAHELIN, MICHAEL WILLIAM

ART UNIT

PAPER NUMBER

3762

NOTIFICATION DATE

DELIVERY MODE

11/25/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DCIPDocket@arentfox.com  
IPMatters@arentfox.com  
Patent\_Mail@arentfox.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/538,234	<b>Applicant(s)</b> TULGAR, METIN	
	<b>Examiner</b> MICHAEL KAHELIN	<b>Art Unit</b> 3762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20051104; 20050609</u> .                                      | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 1, 2 and 3 are objected to because of the following informalities: in claim 1, "the transmitter" is lacking antecedent basis. It is suggested to set forth "a transmitter," and further limit the transmitter in the final clause of claim 1 (e.g., "wherein said transmitter device includes..."). In regards to claims 2 and 3, "said the" should read either "said" or "the." Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 2-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. In regards to claims 2 and 3, no "transmission" has been set forth, thus rendering it unclear what this claim limits. As this is a system claim, it is suggested to structurally or functionally limit an element previously set forth. Further, the limitation "recording or feedback signals" is vague because nothing has been set forth to "record" or acquire "feedback."

5. In regards to claim 4, the limitations drawn to the "fully passive implanted part" is vague because it is unclear whether this is somehow limiting the "passive coil" previously set forth, or is a second "passive part."

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6. In regards to claim 5, the limitation “e.g. two or three” is vague because it is unclear whether the claim requires merely a plurality, or is limited to “two or three.” Further, it is unclear whether the claim requires an additional plurality of passive coils and electrodes, or merely a plurality (i.e., does the claim require at least one in addition to the one set forth in claim 1, or more than one in addition to the one set forth?).

***Claim Rejections - 35 USC § 101***

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-5 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The recitation in claim 1 of “implanted under the skin,” “placed on the skin”; and the recitation in claim 4 of “implanted electrode” inferentially include the human body by their positively recited connection. It is suggested to functionally recite these elements as “adapted to be implanted/placed.”

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boveja (US 6,208,902, hereinafter “Boveja”) in view of Lee et al. (US 5,741,315, hereinafter “Lee”).

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**10.** In regards to claim 1, Boveja discloses a passive coil implanted under the skin (Fig. 6, element 48) connected to an electrode via thin wires (Fig. 6); an active coil (46) placed on the skin linked to a transmitter via a flexible cable (Fig. 6); and a transmitter device with a power source, timer, microcontroller, amplifier, and output transformer to drive the active coil (Fig. 14). Boveja does not expressly disclose that the coils are housed in ferrite pot cores. Lee teaches providing similar transcutaneous devices with ferrite pot cores (Figs. 1 and 2) to provide the predictable result of effectively channeling magnetic flux to improve the signal-to-noise ratio. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Boveja's invention with a ferrite pot core to provide the predictable result of effectively channeling magnetic flux to improve the signal-to-noise ratio.

**11.** In regards to claims 2, 3, and 5, Boveja discloses the essential features of the claimed invention including transferring therapeutic signals from outside of the body, but does not expressly disclose the transfer of recording or feedback signals from the body, or a passive coil array for stimulating a number of sites along neurons. However, it is well known in the art to transfer recording or feedback signals from the body with similar telemetry devices to provide the predictable results of diagnosing various conditions or obtaining a means to adjust patient therapy, and to provide passive coil array for stimulating a number of sites along neurons to provide the predictable results of more specifically targeting the neural structure of interest. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Boveja's invention by transferring recording or feedback signals from the

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body to provide the predictable results of diagnosing various conditions or obtaining a means to adjust patient therapy, and to provide a passive coil array for stimulating a number of sites along neurons to provide the predictable results of more specifically targeting the neural structure of interest.

**12.** In regards to claim 4, Boveja discloses a fully implantable part that includes only a coil (48) and electrode (Fig. 6), thus avoids the risk of surgery from electronic breakdown or expired battery.

### ***Conclusion***

**13.** The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lee is one of many teachings of receiving measured or feedback data from an implant via telemetry, and Schulman (US 7,107,103) or Teills et al. (US 6,348,070) are teachings of using arrays of secondary coils.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL KAHELIN whose telephone number is (571)272-8688. The examiner can normally be reached on M-F, 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Kahelin/  
Examiner, Art Unit 3762

/Angela D Sykes/  
Supervisory Patent Examiner, Art Unit 3762